

2641/207-168



AT 1700 #21 4/10/03

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assista Commissioner for Patents, Washington, D.C. 20231:

By: Wyhn Will

Date: March 31, 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE Before the Board of Patent Appeals and Interferences

Applicant : Friedhelm Beckmann

Applic. No.: 09/666,951

Filed : September 20, 2000

Title : Hollow Section with Internal Reinforcement and

Method of Producing the Hollow Section

Examiner : Shalie A. Manlove - Art Unit: 1755

BRIEF ON APPEAL

Hon. Commissioner of Patents and Trademarks, Washington, D. C. 20231,

Sir:

This is an appeal from the final rejection in the Office action dated September 23, 2002, finally rejecting claims 1-18.

Appellants submit this *Brief on Appeal* in triplicate, including payment in the amount of \$160.00 to cover the fee for filing the *Brief on Appeal*.

04/07/2003 TLUU11 00000005 09666951

01 FC:2402

160.00 OP

Real Party in Interest:

This application is assigned to Möller Plast GmbH of Bielefeld, Germany. The assignment will be submitted for recordation upon the termination of this appeal.

Related Appeals and Interferences:

No related appeals or interference proceedings are currently pending which would directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

Status of Claims:

Claims 1-18 are rejected and are under appeal. No claims were cancelled.

Status of Amendments:

A Response under 37 CFR § 1.116 was filed on December 3, 2002. No amendments were presented after the final Office action. The Primary Examiner stated in the Advisory Action dated January 30, 2003, that the amendment after final would be entered upon the filing of a Notice of Appeal; however, no amendments have been proposed in the filed Response under 37 CFR § 1.116.

Summary of the Invention:

As stated in the first paragraph on page 1 of the specification of the instant application, the invention relates to a hollow section with internal reinforcement, especially for use in car bodies, as well as a method of producing the hollow section.

Appellant outlined on page 7 of the specification, line 22, that, referring now to the figures of the drawing in detail and first, particularly, to Fig. 1 thereof, there is seen a solid core material 1 coated with an activatable material 2. An outer plate 4 is disposed to form a cavity 3. The cavity 3 is completely filled by the operation of foaming the activatable material 2. The size of the cavity 3 is predetermined in accordance with the particular application. For this purpose, spacers 5 are used and, according to Figure 1, are disposed on the inside of the outer plate 4. According to Figure 3, the solid core material 1 is formed by a flexurally rigid hollow section 6.

Appellant explained on page 8 of the specification, line 8, that, before the foaming operation, the hollow section 6 is passed to a corrosion protection dipping bath. Because the inside of the outer plate 4 is still freely accessible in this condition, the corrosion protection agent can reach all

areas of the inner section. The coating of the core material 1 takes place at a temperature which is lower than the stoving temperature for the anticorrosion layer applied in the drying oven. This higher temperature in the drying oven results in a reaction of the coating material, as a result of which the foaming operation is initiated and the cavity 3 which has been deliberately formed is filled with foam.

References Cited:

U.S. Patent No. 5,160,465 (Soderberg), dated November 3, 1992;

U.S. Patent No. 5,194,199 (Thum), dated March 16, 1993;
International application WO 93/05103 (Russell), dated
September 3, 1992

Issues

- 1. Whether or not claims 1-3, 10, and 15 contain subject-matter which was not (sufficiently) described in the specification under 35 U.S.C. § 112, first paragraph.
- 2. Whether or not claims 1-18 are indefinite for failing to particularly point out and distinctly claim the subject matter which appellant regards as the invention under 35 U.S.C. § 112, second paragraph.

- 3. Whether or not claims 1-14 are obvious over Thum in view of Soderberg under 35 U.S.C. §103.
- 4. Whether or not claims 15-18 are obvious over *Thum* and Soderberg in view of Russell under 35 U.S.C. §103.

Grouping of Claims:

Claims 1 and 15 are independent. Claims 2-14 depend on claim 1 and claims 16-18 depend on claim 15. The patentability of the dependent claims are not separately argued. Therefore, claims 2-14 and 16-18 stand or fall with claims 1 and 15, respectively.

Arguments:

Arguments for traversing the § 112 rejections

On page 2 of the Advisory Action, the Examiner maintained that "[t]he activatable foamable material is not clearly taught, specific materials are neither identified in the specification nor claimed." For the reasons stated below, Appellant believes that there is sufficient support for "activatable foamable material" in the instant application.

Appellant believes that the US PTO's interpretation and position on statutory law and case law is codified or summarized in the MPEP. Hence, it may be more efficient to

start the discussion with the review of the relevant and applicable MPEP provisions.

Regarding disclosure, MPEP § 2163 (8th ed) states in the last paragraph on page 157:

While there is no in haec verba requirement, newly added claim limitations must be supported in the specification through **express**, **implicit**, or **inherent** disclosure.

(emphasis added)

On page 6, lines 9-14, the instant application states that:

... a reaction of the *activatable material* is deliberately *initiated* ... and the cavity originally deliberately formed between the activatable material and the outer plate is filled by the *foam* which forms.

(emphasis added)

Similarly on page 7, line 23, through page 8, lines 18, the instant application states:

... solid core material 1 coated with an activatable material 2. An outer plate 4 is disposed to form a cavity 3. The cavity 3 is completely filled by the operation of *foaming* the *activatable material* 2.

Before the *foaming* operation, the hollow section 6 is passed to a corrosion protection dipping bath. ... [The] higher temperature in the drying oven results in a *reaction* of the *coating material*, as a result of which the *foaming operation is initiated* and the cavity 3 which has been deliberately formed is filled with *foam*.

(emphasis added)

Consequently, it is believed to be clear that the activatable material disclosed in the specification refers to material which is activatable to foam, and if activated, form foam.

In other words, the activatable material disclosed in the specification is activatable foamable material.

Consequently, Appellant believes that the instant application expressly discloses that the activatable material disclosed in the specification is activatable foamable material and, therefore, there is sufficient disclosure for the feature "activatable foamable material" in the claims.

Even if it is assumed for argument's sake that the feature "activatable foamable material" is not expressly disclosed, it is believed to be clear that this feature is at least implicitly disclosed when applying the appropriate test set forth in the MPEP. The first sentence of MPEP § 2144 (8th edition) states that "[i]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." (emphasis added). From the above-noted passages of the specification, it is believed that a person skilled in the art would draw the interference that the

reference to "activatable material" in the specification is to activatable **foamable** material.

Furthermore, according to MPEP § 2163.04 (8th edition):

2163.04 Burden on the Examiner with Regard to the Written Description Requirement

The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., In re Marzocchi, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. Wertheim, 541 F.2d at 263, 191 USPQ at 97.

According to MPEP § 2163.04 (8th edition), the Examiner has the burden of proof by a preponderance of the evidence why a person skilled in the art would not recognize in an Appellant's disclosure a description of the invention defined by the claims. For the reasons given above, it is believed that the Examiner did not show by a preponderance of the evidence that a person skilled in the art would **not** draw the interference that the activatable material disclosed in the specification - either expressly, implicitly, or inherently - is activatable **foamable** material.

Finally, on page 2of the *Advisory Action*, the Examiner has stated that "not all case law is recited in the MPEP." In reply, Appellant invites the Examiner to cite case law which overrules the case law in the MPEP cited by Appellant.

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, first and second paragraphs.

Arguments for traversing the prior art rejections

On page 2 of the Advisory Action, the Examiner maintained that that "[t]he limitations of the instant claims have been taught by the prior art"." For the reasons stated below, Appellant believes that the invention of the instant application, as recited in the claims, is **not** taught by the prior art.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 (similarly claim 15) calls for, inter alia:

coating a solid core material with activatable foamable material;

enclosing the solid core material and the activatable foamable material with an outer plate to form an assembly with a defined cavity inside said outer plate;

passing the assembly to a corrosion treatment bath and subjecting **all** interior areas of the assembly to a corrosion protection agent; and

subsequently passing the assembly to a drying oven for heating and, thereby, initiating foaming of the activatable foamable material at least partly filling the defined cavity.

In item 9 on page 4 in the Office action dated May 23, 2003, the Examiner stated that "Thum fails to teach the processing steps whereby corrosion treatment is separate and prior to the expansion of foam step." The Examiner then applies the secondary reference Soderberg.

In item 4 on page 3 of the final Office action, the Examiner stated that:

Soderberg discloses submitting the vehicle to low temperature anti-corrosion treatment (col. 3, lines 1-10). ... by submitting the vehicle to treatment; one would be applying treatment to the exterior as well as the interior.

In col. 2, lines 67, through col. 3, line 9, Soderberg state:

... assembling the part in the open space of a vehicle body ... submitting the **vehicle to ... anti-corrosion treatment** whilst the insert remains unexpanded; and submitting the vehicle body to ... curing treatment ... such that the insert expands, contacts and adheres to the surrounding **metal** surface ...

(emphasis added)

Soderberg discloses submitting the (whole) vehicle to anticorrosion treatment, presumably also the passenger cabin of
the vehicle, but does not disclose submitting all the
interior areas (note plurality) of the assembly to corrosion
treatment. Soderberg states that the expanded compound
contacts the surrounding metal surface and not, like the
invention of the present invention, a (previously) applied
corrosion protection agent.

Soderberg discloses the use of a composition which is foamed at one stage. In col. 3, lines 14-15, Soderberg states that "[t]he foam is non-moisture-absorbing and so corrosion of vehicle parts can be minimised". If the interior areas of the assembly in Soderberg would be subjected to anticorrosion treatment, then it would not be necessary to use a non-moisture-absorbing foam to minimize corrosion. Hence, Soderberg not only does not disclose "subjecting all interior areas of the assembly to a corrosion protection agent", as

recited in the claims of the instant application, but in fact teaches away from subjecting the interior areas of the assembly to anti-corrosion treatment.

Arguments Against Combining Thum And Soderberg

Soderberg discloses a composition foamed to provide closed cell foam "so as to provide a sound and/or moisture barrier" (col. 1, lines 10-11). In contrast, Thum discloses a "beamlike structural part" "that will absorb kinetic energy upon impact" (col. 1, lines 12-13). MPEP § 2143 requires that there must be some suggestion or motivation with a reasonable expectation of success for combining references. Considering the different purposes and structural considerations of Thum and Soderberg, it is believed that there are no suggestions or motivations with a reasonable expectation of success for combining Thum and Soderberg.

In item 5 on pages 3-4 of the final Office action, the Examiner stated in regard to Appellant's argument that there are no suggestions or motivations to combine the references, that:

In this case the references combined disclose a hollow section with internal reinforcement as is similarly presented in the instant application. The Examiner deems the references applicable as prior art in respect to the Applicant's invention.

(Underlining in the original).

Appellant agrees with the Examiner that "the references [are] applicable as prior art in respect to the Applicant's invention" and, consequently, applicable as prior art in respect to the Appellant's invention. However, this is irrelevant as to the issue of combinability.

Appellant believes that "references combined disclose a hollow section with internal reinforcement as is similarly presented in the instant application" by itself does not constitute the required "suggestion or motivation with a reasonable expectation of success" for the reasons discussed in the paragraph bridging pages 11 and 12. Hence, it is believed that the required "suggestion or motivation with a reasonable expectation of success" for combining Thum and Soderberg (and Russell) has not been shown by the Examiner. In fact, as discussed in the second paragraph on page 11, Soderberg teaches away from subjecting the interior areas of the assembly to anti-corrosion treatment.

Considering the deficiencies of *Thum* and *Soderberg*, it is believed not to be necessary to address *Russell*, and whether or not there is sufficient suggestion or motivation with a reasonable expectation of success for modifying or combining the references as required by MPEP § 2143.

It is accordingly believed to be clear that *Thum* in view of *Soderberg* do not suggest the features of claim 1 and that *Thum* and *Soderberg* in view of *Russell* do not show the features of claim 15. Claims 1 and 15 are, therefore, believed to be patentable over the art and since claims 2-14 and 16-18 are ultimately dependent on claims 1 and 15, respectively, they are believed to be patentable as well.

The honorable Board is therefore respectfully urged to reverse the final rejection of the Primary Examiner.

Respectfully submitted,

MARKUS NOLFF REG. NO. 37,006

For Appellants

MN/bb

Date: March 31, 2003

Lerner and Greenberg, P.A.

Post Office Box 2480

Hollywood, Florida 33022-2480

Tel: (954) 925-1100 Fax: (954) 925-1101

APR 0 3 2003 5 Appendix Appendix ed Claims:

1. A method of producing a hollow section with internal reinforcement, which comprises:

coating a solid core material with activatable foamable material;

enclosing the solid core material and the activatable foamable material with an outer plate to form an assembly with a defined cavity inside said outer plate;

passing the assembly to a corrosion treatment bath and subjecting all interior areas of the assembly to a corrosion protection agent; and

subsequently passing the assembly to a drying oven for heating and, thereby, initiating foaming of the activatable foamable material at least partly filling the defined cavity.

- 2. The method according to claim 1, wherein the cavity is defined between the outer plate and the activatable foamable material.
- 3. The method according to claim 1, wherein the cavity is completely filled by foaming the activatable foamable material

Appendix: Page 1 of 5

- 4. The method according to claim 1, wherein the solid core material is formed of a foamed metallic material.
- 5. The method according to claim 1, wherein the solid core material is formed of an unfoamed metallic material.
- 6. The method according to claim 1, wherein the solid core material is formed of a synthetic material reinforced with fibers selected from the group consisting of metal fibers, carbon fibers, and glass fibers.
- 7. The method according to claim 1, wherein the solid core material is formed of a hollow section.
- 8. The method according to claim 1, which comprises maintaining a temperature for coating the solid core material lower than a stoving temperature for an anticorrosion layer in the drying oven.
- 9. The method according to claim 1, which comprises forming the cavity between the activatable foamable material and the outer plate with spacers formed on the activatable foamable material.

Appendix: Page 2 of 5

- 10. The method according to claim 1, wherein the coating step comprises coating the solid core material with the activatable foamable material only in some areas.
- 11. The method according to claim 1, which comprises selecting the core material and the outer material from the group of materials consisting of reinforcing foam, energy-absorbing foam system, and an acoustic foam.
- 12. The method according to claim 11, which comprises forming the core material from an energy-absorbing material and selecting an outer material used for coating from the group of materials consisting of a reinforcing material and an acoustic foam.
- 13. The method according to claim 11, which comprises forming the core material from a reinforcing material and selecting an outer material used for coating from the group consisting of an energy-absorbing material and an acoustic foam.
- 14. The method according to claim 11, which comprises forming the core material from an acoustic foam and selecting an outer material used for coating from the group consisting of a reinforcing material and an energy-absorbing material.

Appendix: Page 3 of 5

15. A hollow section, comprising:

a solid core material formed of a material selected from the group consisting of foamed metallic material, unfoamed metallic material, synthetic material reinforced with fibers selected from the group consisting of metal fibers, carbon fibers, and glass fibers;

an activatable foamable material enclosing said solid core material;

an outer plate enclosing said solid core material and said activatable foamable material to form an assembly with a defined cavity inside said outer plate; and

a corrosion protection agent applied to all interior areas of said assembly before heating said assembly and, thereby, initiating foaming of the activatable foamable material at least partly filling said defined cavity.

- 16. The hollow section according to claim 15, wherein said cavity is completely filled by said foamed material
- 17. The hollow section according to claim 15, wherein said solid core material is coated with said foamed material only in some areas.

Appendix: Page 4 of 5

18. The hollow section according to claim 15, wherein said core material and an a coating outer material are formed of material selected from the group consisting of a reinforcing foam, an energy-absorbing foam system, and an acoustic foam.

Appendix: Page 5 of 5